

CASE STUDY

TFC Jet Pumps

TFC Jet Pump replaces ESP & greatly reduces workover cost while continually chemically treating wellbore

INTRODUCTION

A Madison County, Texas, well in the Woodbine formation being produced with an ESP was facing high workover cost due to produced solids content and scaling issues. The well was unable to be chemically treated with the ESP and mechanical failures were common.

CHALLENGE

To eliminate the need for workovers, handle solids and chemically treat the wellbore for scale and corrosion.

SOLUTION

After being shut in for several months, a TFC jet pump was installed in the well in August of 2011. A 200 HP triplex pump driven by a Cummins natural gas engine was selected for the surface equipment. In a matter of two days the installation process was complete and the well was producing.



Permanent unit with Cummins natural gas engine.

RESULTS

Well production while on ESP was 10 bbls oil, 500 bbls water with little gas, using 180 mechanical hp.

After the jet pump installation completed, well production was increased to 15 bbls oil, 550 bbls water, and 27 mcfpd of gas using 150 mechanical hp. In addition, the client was able to discontinue usage of a gen set and spare the cost of bringing electricity to the location by installing the Cummins natural gas engine to utilize the well's produced gas for fuel.

Since installation, no workover has been needed. The client has been able to eliminate their scale problem through chemical injection into the suction of the triplex pump, as well as handle the large amounts of solids produced.

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The client's Production Foreman said, "Out of all our artificial lift systems, jet pump is by far the most reliable."